

Medical molding is Rx for Mack

By Mike Verespej
PLASTICS NEWS STAFF

The sluggish economy isn't keeping Mack Molding Co. from growing its medical business — which didn't even exist until eight years ago.

"This is a real nice roll we are on," said Jeff Somple, president of the company's northern division, where most of Mack's medical work is concentrated. "We are probably going to have half of our business in medical by next summer" when production fully ramps up on two major medical devices that Mack will start making in the next few months.

Currently, medical accounts for roughly 35 percent of the Arlington, Vt., company's sales, estimated to be \$292 million for its fiscal year that ended June 30, 2008. That is up from 25 percent two years ago, when the company was *Plastics News*' Processor of the Year. Because of the growth in its medical business, Mack announced June 8 at Medical Design and Manufacturing East in New York that it has formed MackMedical, based in Arlington, to manage all of its medical business.

"We have developed a robust medical products group within Mack Molding" that accounts for 30 percent of the company's sales today, said Somple.

Jeff Somple
of Mack Molding Co.



Hubert Schriebl photo

At right, Kalamazoo, Mich.-based Stryker Corp.'s orthopedic knee-implant system includes a case and tray delivery system molded by Mack.



Mack Molding Co. photo

It is expected to grow to 50 percent of Mack's business in the near future with the addition of large-part clean room molding and other medical design services, he added. "We now have all the markers in place to legitimately call ourselves MackMedical."

Mack entered the medical market shortly after reinventing itself in 2001 from a company that derived 70 percent of its sales from molding related to computer equipment, servers and storage devices.

"If you come up with a vision, stick to it, and put some resources behind it, you can be successful," Somple said.

Mack has a workforce of 1,800, more than 1.5 million square feet of manufacturing space and 120 injection molding machines, with clamping forces of 28-4,000 tons. The northern division, with plants in Arlington, East Arlington and Cavendish, Vt.; and Gardiner, Mass., has 80 injection molding machines. Its plants in Statesville, N.C., and Inman, S.C., which make up its southern division, have 40 presses, more than half of them over 1,000 tons.

While the company has scaled back its short-term sales growth expectations from 10-20 percent to 5-10 percent because of the economy, it is not holding back on its plans to grow, Somple said.

"I think a lot of American manufacturers get scared in this type of economic environment," he said. "But in an economy like this, you have to get aggressive with sales and constantly sell. We are stepping up in that arena when others are cutting back. And financially we are strong. To grow 10 percent in this economy would be remarkable."

But Mack isn't only making advances in its medical business — which is divided among disposables, medical devices and orthopedic products.

It also is finding success in manufacturing:

? Products such as large, durable heavy-duty truck assemblies and truck floorboards.

? Items with low to medium volumes that come in different configurations and colors.

? Big, bulky products that are difficult to ship from overseas, and complex products with many parts.

"Our capabilities lend themselves to large, complicated products of all kinds," Somple said. "Things that are hard to make are our specialties."

Two recent examples of its success in that area: About a year ago, Mack began to make the highly complex self-serve f'REAL milkshake machines found in conven-

ience stores. In addition, it began manufacturing the solar-powered trash compactors for Big-Belly Solar in Newton, Mass., in October 2007. Both products are made at the Arlington plant.

BigBelly trash compactors are the size of conventional trash containers, but hold five to seven times the amount of trash. They use the same amount of energy daily that it takes to make a piece of toast. They also reduce fuel use and greenhouse-gas emissions by 80 percent because sites are able to cut their number of collections by about 80 percent, according to Mack.

The trash compactors are big, bulky and expensive to ship, have a lot of components that require exact specifications and are made in volumes that aren't attractive to offshore manufacturers, Somple said. As for the milkshake machines: "They are very complex with hundreds of parts that require assembly. We are doing full turnkey manufacturing of them.

"One of the questions we always ask is why wouldn't someone make this product in China," Somple said. "Our mission is to be a North American manufacturer and we consider ourselves a North American manufacturer."

Mack has to be convinced a product will be made in the U.S. before the firm will commit to proceeding on a project, Somple said. "If it is easy, anyone can make it and anyone will — especially in this desperate environment."

Critically, the company continues to expand and grow its medical business.

"We have been taking a good run at the medical market in the last 10 years and put a lot of pieces to a very big puzzle in place," said Somple.

"We have been able to make the investments in a lot of equipment and a lot of technology," he said. "We have the equipment to make everything from orthopedic products and very complex, fully assembled medical devices, all the way down to small plastic parts. We have three very distinct markets that we capture under one unit. I don't think anyone else out there is doing this."

To aid in that, the company divided a molding area in half at its Arlington plant 18 months ago and added a 2,000-square-foot clean room that has five injection molding machines ranging from 40-100 tons, including one electric press of 55 tons. Each press has its own dedicated vacuum dryer that reduces energy consumption by nearly 80 percent, and can dry resin in one-



Hubert Schrieber photo

A Mack medical molding cell, above. At right, Mack began manufacturing solar-powered trash compactors for BigBelly Solar in Newton, Mass.

sixth the time of conventional desiccant dryers, he said.

The clean room work cell is designed for short runs, small-lot parts and parts that come in multiple colors. "It is a controlled environment where the parts come out clean," Somple said. "It allows us to focus on small-part molds and continues to allow us to expand in orthopedics."

Currently, orthopedics is the largest segment of the company's medical business, with products such as knee-replacement kits.

Within that segment, disposables have been growing strongly, driven by the need to reduce infections and reduce the time of surgeries, he said. "There is a movement toward disposables in orthopedics and all types of surgeries," Somple said. "There is the fear of infection, and sterilization costs are going up because of the hand labor and hand washing."

But over the long-term, the largest and fastest-growing opportunity is medical devices because of the outsourcing by original equipment manufacturers that want to put all their dollars into research and development, and sales and marketing.

"Customers want full assemblies or high-level subassemblies. The numbers are staggering," Somple said.

"Orthopedics are growing nicely, but device growth will leapfrog that," he said. "And, in the future, disposables will be the third leg of our business. As a molder, we like disposables because that means we can make more of them."

Somple said Mack also intends to



Mack Molding Co. photo

get into manufacturing the packaging for disposable parts, "but we are not there yet."

Mack has a number of advantages in serving the medical market, including its background as a molder and its focus on quality, according to Somple.

"Companies want us to validate the process and software for them and to treat products we make for them as medical devices," said Somple. "Our customers are putting a lot of responsibility on the supply base that didn't exist before."

Those growing requirements also raise the bar and make the barriers to entry more difficult for others, he said. "Getting into medical requires a lot of investments in people, systems and technology. Not everyone can do it."

Somple also said he expects Mack to be able to strengthen its position in the medical business in the current economic climate as some medical companies are certain to fall by the wayside.

"I see a big shakeup coming in medical," he said. "There are going to be fewer, but stronger players and we will be one of them."